# Public Safety Interoperable Communications (PSIC) Grant Overview

The Public Safety Interoperable Communications (PSIC) grant program as administered through the U.S. Department of Homeland Security via an agreement with the U.S. Department of Commerce, National Telecommunications and Information Administration (NTIA) is intended to support State Plans for Interoperability.

In June 2005, the Public Safety Communications Commission (PSCC) issued a Concept of Operations document that identifies the need for interoperability and the high-level steps the State will take to achieve interoperability (See <a href="http://www.azdps.gov/pscc/PSCCFinalConOps102605.pdf">http://www.azdps.gov/pscc/PSCCFinalConOps102605.pdf</a>). Utilizing the work of several subcommittees, including the Statewide Interoperability Executive Committee (SIEC), the U.S. Department of Homeland Security SAFECOM Interoperability Continuum, and after receiving extensive local input, the PSCC has developed the initiatives described in this Overview. The State is in the process of developing the Statewide Communications Interoperability Plan (SCIP) to which these initiatives will apply. Drafts of the SCIP can be found for comment at: <a href="http://www.azdps.gov/pscc/standards.asp">http://www.azdps.gov/pscc/standards.asp</a>

In preparing the PSIC statewide application to be submitted to the U.S. Department of Homeland Security, the state of Arizona is complying with the guidance published by the U.S. Department of Homeland Security and the National Telecommunications and Information Administration (NTIA). The guidance can be found at: <a href="http://www.ntia.doc.gov/psic/applicant.html">http://www.ntia.doc.gov/psic/applicant.html</a>.

# I. Grant Description

The Public Safety Interoperable Communications (PSIC) Grant Program is a <u>one-time matching</u> grant program intended to provide public safety agencies with the opportunity to achieve meaningful and measurable improvements to public safety communications interoperability through the efficient use of telecommunications resources, and in concert with the Statewide Communications Interoperability Plan (SCIP).

This is a limited grant for specific projects only. Before considering whether to apply, it is imperative that you review all of the criteria of the grant as described in this overview. There are specific identified initiatives and technologies that will be considered as well as a 20% match requirement (see below).

**Priorities** - The following are the Statewide priorities for the PSIC:

- **Multi-agency, Multi-jurisdiction** Projects must be in support of multiple agencies, disciplines, jurisdictions and/or regions.
- **Technology** -- Projects should adopt advanced technological solutions, improve spectrum efficiency or use cost-effective measures.
- All Hazards Mitigation -- Projects should:
  - 1. Improve communications in areas at high risk for natural disasters.
  - 2. Continue to improve interoperability efforts in urban and metropolitan areas at high risk for threats of terrorism (such as large population areas, Arizona's border with Mexico and areas where critical infrastructure is housed.

#### Coverage

Statewide interoperability has been and continues to be a priority for Arizona. Governor Janet Napolitano announced recently that she supports aggressive implementation of interoperable communications to attain the goal of interoperability among public safety entities serving 85 percent of Arizona's population within the next 2 years. Therefore, to be considered for this grant, all projects should fulfill at least one of the following coverage goals:

- 1. Advance the goal of achieving interoperability to 85% of Arizona's population within 2 years or as soon as possible, OR
- 2. Support critical communication needs to parts of the State that currently lack effective communication capabilities and otherwise meet the technology, all hazards mitigation and multiagency/jurisdictional grant review criteria.
- PSIC funding <u>will not support</u> projects that fall into the following categories:
  - 1. **Single Agency Projects** PSIC will not support projects that emphasize the internal communications needs of a single agency, even if the agency has a considerable number of offices or users in different cities or regions. Projects should include multiple agencies and/or disciplines.
  - 2. **Single Jurisdiction** PSIC will not support an interoperability project that only serves a single jurisdiction. PSIC projects should be multi-jurisdictional and/or regional in scope.
  - 3. **Supplanting** PSIC grant funds cannot be used to replace (supplant) funds that have been appropriated for the same purpose. PSIC funds may not be used to support the hiring of sworn public safety officers for the purpose of fulfilling traditional public safety duties or to supplant traditional public safety positions and responsibilities.

**20% Match** - Applicants for PSIC funding must meet and document a 20% statutory match requirement (nonfederal funds) from local sources for each project funded during the performance period. However, local units of government, tribal government and/or nongovernmental entities may enter into a Memorandum of Understanding (MOU) with the State (for the State to implement the proposed project in their jurisdiction) in which case the State would have the obligation for the 20% match if the project is funded. Please note: planning, coordination and training funds requested to support implementation do not require a 20% match.

Memoranda of Understanding (MOUs) - If an agency plans to pass through funds to the State or a regional agency for implementation of the project, an MOU is required. If there are multiple agencies or jurisdictions applying under a lead agency/jurisdiction, an MOU is required from the lead applicant only. However, if a single agency/jurisdiction is applying separately as part of a multi-agency/jurisdiction project, an MOU is required from that single agency/jurisdiction. (An example MOU is posted on our website.)

**Project Precedence** - The State will apply the following project precedence to funding decisions:

- 1. Projects which are proposed under Initiatives 1, 2 and 3 will be prioritized based on the Review Criteria (see "Review Criteria, Funding Recommendations & Approval Process" after the initiatives below).
- 2. Projects under Initiatives 1, 2 and 3 will be funded before projects under Initiatives 4 and 5, subject to a compelling case being presented for a project under Initiatives 4 or 5 based on the Review Criteria and the submissions received.

### II. Initiatives

## Initiative # 1 Modern Regional System Enhancement

The intent of this initiative will be to create a cost-effective, shared environment of improved interagency communications in areas throughout the State where progress has already been made or is being planned. The objective is to encourage expanded coverage and capacity of existing regional systems, operating in a P25 compliant 700/800 MHz trunked environment, which closely parallel the PSCC's long-term solution. Examples of currently recognized regional systems include Phoenix/Mesa (PRWN/TOPAZ), Yuma County (YRCS), Pima County (PCWIN), Coconino County (NAU/FLAG PD) and Maricopa County.

An application under this initiative must include one of the following for consideration:

### A - Local Jurisdiction or Other State Agency; System Owner/Manager

- 1) Radio frequency base stations and control electronics.
- 2) Mobile, portable and control station radios.
- 3) Remote communication site development to expand, modernize or to construct shared sites. Purchase, construction and installation of antenna support structures (towers), construction or enhancement of equipment shelters, civil work or power systems. (For construction approval process, see PSIC Program Guidance, A.4.3, page 39.)
- 4) Private microwave or fiber connections to the State backbone or local Network Operations Center.

### B - Local Jurisdiction & Other State Agency; Non-system Owner

- 1) Radio frequency base stations and control electronics, necessary to develop the required coverage and capacity to join a regional system.
- 2) Mobile, portable and control station radios.
- 3) Remote communication site development to expand, modernize or to construct shared sites. Purchase, construction and installation of antenna support structures (towers), construction or enhancement of equipment shelters, civil work or power systems. (For construction approval process, see PSIC Program Guidance, A.4.3, page 39.)

In order to join a System, funding must be in the form of a pass-through to the State or regional receiving partner to expand or add to the State or regional system, subject to scheduling and availability as determined by the receiving partner and required Department of Public Safety (DPS)/Wireless Systems Bureau (WSB) support.

## Initiative #2 State Microwave Backbone Infrastructure

The State's microwave network provides the infrastructure necessary to connect remote communication sites together. A multitude of agencies (state, county and federal users) currently rely on the existing DPS analog microwave network which is obsolete, no longer supported by manufacturers, and not capable of supporting modern communications systems. To advance the State's goals of constructing a modern interoperable land mobile radio network, the State will need to install digital microwave equipment. With an upgraded digital microwave infrastructure, the State will have the backbone required for a modern, standards-based interoperable

radio network. Once the digital statewide microwave network is completed; other local, state, tribal, federal and authorized non-governmental entities will have the capability of joining the statewide network for their day-to-day operations as well as for interoperability. The microwave system will also foster a broad level of interoperability with existing regional systems by network-to-network connections through the microwave backbone.

In addition to the new microwave equipment that will need to be installed; power supplies, battery systems, and standby generators may need renovation or replacement as well.

An application must include one of the following for consideration under the Microwave Backbone Infrastructure component:

- A Remote communication site development to expand, modernize or to construct shared sites. Purchase, construction and installation of antenna support structures (towers), construction or enhancement of equipment shelters, civil work or power systems. (For construction approval process, see PSIC Program Guidance, A.4.3, page 39.)
- B Transfer of funds or transfer of microwave equipment in order to expedite this solution for a specific regional area; however, DPS/WSB will still retain ALL authority over microwave specifications and scheduling.

## Initiative #3 Arizona Interagency Radio System

The focus of the Arizona Interagency Radio System (AIRS) project is the development of a near-term statewide interoperability solution to immediately improve radio communication between agencies utilizing public safety mutual aid radio channels. The SCIP recognizes the significant investment in the installed base of VHF and UHF systems serving many local and federal agencies and the need to provide advanced technology solutions to connect these existing systems. The first step is a network of mutual aid channels to the State's 700 MHz trunked system.

#### The primary objectives of AIRS are:

- 1) To improve coverage in all counties by upgrading and adding VHF, UHF and 800 MHz base stations statewide.
- 2) To establish and expand the use of statewide and nationwide mutual aid frequencies throughout the State.
- 3) To enable multi-channel capabilities for statewide and regional use.
- 4) To establish operational procedures in order to facilitate communications for first responders.

In addition to requiring an MOU with the PSCC for AIRS, an application must include one of the following for consideration under this component:

#### A - Control Stations to be purchased for single-channel access to a local AIRS site, which may include:

- 1) Expansion of an existing radio dispatch console. Expansion may include more than one channel position based on the system's current configuration. Radio dispatch console replacement is not allowed with these funds.
- 2) Purchase and installation of the necessary VHF, UHF or 800 MHz antenna and feedlines. Replacement, structural improvements, or new construction of antenna support structures are not allowed with these funds.

- B Private microwave or fiber connections to the DPS microwave backbone or local network operations center (NOC) for regional access to multiple AIRS sites. If applying for microwave equipment, the path must be licensed under FCC Part 101 and protected by either a "hot standby" configuration or alternate routing. DPS/Wireless Systems Bureau (WSB) will retain ALL authority over microwave specifications and scheduling. The private microwave or fiber connection may include:
  - 1) Multiple channel dispatch console expansion.
  - 2) Purchase and installation of necessary antenna(s) and feedlines. Limited structural improvements to an existing tower may be considered.

# Initiative #4 High-Level Network Connections to Existing Regional Systems

While the goal of the Statewide Plan is to create a cost-effective, shared environment of improved interoperable communications, it is also understood that there are regional multi-user systems operating in the VHF spectrum throughout the state today. The SCIP recognizes the significant investment in this base of equipment serving many local and federal agencies and the need to provide advanced technology solutions to connect existing systems whenever and wherever possible. Local governments are urged to prepare their systems to enable connectivity and compatibility with the new statewide network. For existing VHF spectrum regional multi-user systems, network level interoperability solutions with the statewide system should be considered, such that they can continue to utilize existing radio equipment but connect with the statewide solution when it is possible and beneficial to do so.

The objective is to encourage local governments to establish new, modernize, expand capacity and/or provide alternate routes for high-level network connections to the PSCC Long-Term Solution or expanded Regional Systems from existing regional multi-user systems operating in the VHF spectrum.

An application under this initiative must include one of the following for consideration:

- 1. Private microwave or fiber connections to the State or regional backbone or local NOC.
- 2. Remote communication site development to expand, modernize or to construct shared sites. Purchase, construction and installation of antenna support structures (towers), construction or enhancement of equipment shelters, civil work or power systems. (For construction approval process, see PSIC Program Guidance, A.4.3, page 39.)
- 3. 700/800 MHz control stations to provide Public Safety Answering Point (PSAP) connections to the PSCC Long-Term Solution and/or an existing Regional System.

In order to join a System, funding must be in the form of a pass-through to the State or regional receiving partner to expand or add to the state or regional system, subject to scheduling and availability as determined by the receiving partner and required DPS/WSB support.

### Initiative #5 PSCC Long-Term Solution

In a series of regional forums, the PSCC has presented the conceptual design for a statewide interoperable communications system, which will build on the spectrum efficiency already incorporated into the regional 800

MHz multi-use trunked systems serving Arizona's largest metropolitan and urban population center areas today. The statewide solution will provide a common fabric between existing multi-user systems. The SCIP outlines the progressive development of a statewide 700 MHz, trunked, Project 25 solution to serve as Arizona's common interoperable communications platform through a multi-phased approach. That approach will begin with those existing systems in high-density populated areas, along transportation corridors and designated portions of the international border recognized as high-risk areas for acts of terrorism, and will expand out from there.

An application under this initiative must include one of the following for consideration:

- 1. Radio Frequency base stations and control electronics, necessary to develop the required coverage and capacity to join the statewide system.
- 2. Mobile, portable and control station radios.
- 3. Remote communication site development to expand, modernize or to construct shared sites. Purchase, construction and installation of antenna support structures (towers), construction or enhancement of equipment shelters, civil work or power systems. (For construction approval process, see PSIC Program Guidance, A.4.3, page 39.)
- 4. Transfer of funds or equipment in order to expedite this solution for a specific regional area; however, DPS/WSB will still retain ALL authority over equipment specifications and scheduling.

# III. How to Apply

After carefully reviewing the Initiatives, the Review Criteria, and Funding Recommendation & Approval Process (below, including funding priorities), please visit the Arizona Department of Homeland Security (AZDOHS) website at <a href="https://www.azdohs.gov">www.azdohs.gov</a> to download the application workbook package. Workbooks must be submitted to the Regional Strategic Planner designated for your Homeland Security Region no later than **5:00 p.m. on**October **28, 2007.** 

# IV. Review Criteria, Funding Recommendation & Approval Process

- Key Review Criteria As required by the PSIC Grant Program and with consideration for the special needs and concerns of Arizona, all projects will be reviewed according to the Priorities as laid out under "Section I: Grant Description."
- All applications will be reviewed for completeness by the Arizona Department of Homeland Security Planning staff.
- Project applications must be filled out in specific detail. Jurisdictions submitting incomplete project workbooks will not be considered for funding.
- The Public Safety Communications Commission (PSCC), as the State's point of contact for the SCIP, will convene an Interoperability Work Group (IWG) of subject matter experts to review all applications submitted to the Arizona Department of Homeland Security. Comments and recommendations of this workgroup will be forwarded to each Regional Advisory Council (RAC).
- The Regional Advisory Councils shall develop a list of requests for state homeland security grant program monies and forward these requests to the Director and recommend allocation based on regional, state and federal criteria.
- The Homeland Security Coordinating Council (HSCC) will receive a list of recommended PSIC projects.
- The Arizona Department of Homeland Security Director will review all recommendations and make final awards for the PSIC grant.
- Awards will be made within 60 days after the state of Arizona has received an official allocation from the U.S.
  Department of Homeland Security/U.S. Department of Commerce, National Telecommunications and Information Administration. We anticipate this to be sometime early 2008.
- State's grant close date is **March 31, 2010**. Accordingly, all expenditures need to be completed by March 31, 2010.